Purchase Order Receipt Listing

Wednesday, February 22, 2017 2:00:04 PM

All amounts are calculated in domestic currency.

All Vendors PO ID PO35299 Receipt Dates from 2/22/2017 to 2/22/2017 All Line Item Types All Item ID/GL/WOs All Rec. Employees All Currencies Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name	dor Name		VC-COP001 Thyssenki	Thyssenkrupp Materials CA Ltd							
PO35299	_	>	M6061T6B1.000X16. f		2/27/2017	2/27/2017 2/22/2017	24.0000	\$41.11	0.0000	0	\$986.75
CAD	o _N		6061-T6 Bar 1.00 x f 16.00 m136899	L	24,0000	PLOU01		\$986.75	0.0000	0	
	23	2	M7075T6B6.000X1.0 f	6	2/21/2017	2/22/2017	3.9800	\$30.60	0.0000	0	\$121.77
	°Z		7075-T6 BAR 6.000" f X 1.000" m136899	64	8.9166	PLOU01		\$121.77	0.0000	0	
					2/21/2017	2/22/2017 PLOU01	4,9366	\$30.60	0.0000	0	\$151.04
	4		M7075T6B7.000X2.0 f		2/21/2017	2/22/2017	7.8000	\$65.50	0.0000	0	\$510.92
	Š		7075-T6 BAR 7.000" f X 2.000" (order in billets - 13.375") m136899		13.3750	PLOU01		\$510.92	0.0000	0	
					2/21/2017	2/22/2017 PLOU01	5.5750	\$65.50	0.0000	0 0	\$365.17
								Total	Total Received Quantity: Total Qty to Inspect (PO U/M):	uantity: O U/M):	46.2916

0.0000

Total Reject Quantity: Total Receipt Value:

Total Balance Due Quantity:

0.0000

\$2,135.66

PEC 31608 BILL OF LADING No: Ship Date 17Feb17 at 11:38 From PFW Ship From: THYSSENKRUPP MATERIALS NA Probill 2821 LANGSTAFF ROAD Via VIM DELIVERY CONCORD, ONTARIO L4K 5C6 Tel: 905 669 9444 Fax: 905-738-9033 FOB CONCORD Frt PREPAID 0- 0 Manifest Route Vhcle Trailer 19505Slp STAN IVERS (905-532-1350) (1) 31809 Ship To: Sold To: (20115) DART AEROSPACE DART AEROSPACE 1270 ABERDEEN ST 1270 ABERDEEN ST HAWKESBURY, ON K6A 1K7 HAWKESBURY, ON K6A 1K7 Tel: 613-632-9577 Fax: 613-632-1053

BILL OF LADING 1) Our Order PEC- 18051- 1 Your PO # 35299 ALUMINUM FLT BAR ECONOPLT 6061-T6511 1.00" X 16.00" X 144.0000" Ouantity Heat Number Wt. LBS Tag No 22730458 620038 465 /24 FT Tags LBS TOTAL: 465

SHIP WITH 17992 *****

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

TOTAL 1 BDL GW. 540 LBS

CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA CONCORD, ONT. *** 9:00 AM TO 4:00 PM *** **** TEL. 800-926-2600 ****

******************* WE STOCK STAINLESS STEEL PLEASE LET US QUOTE YOUR NEXT REQUIREMENT

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE

Page: 1Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT. MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION TVQ/QST# 1017327981 TQ001 TPS/GST TVH/HST # 140223934 RT0001

DATE

102-20

No: BILL OF LADING PEC 31608 Ship Date 17Feb17 at 11:38 From PFW THYSSENKRUPP MATERIALS NA Probill Via VIM DELIVERY

102-20

2821 LANGSTAFF ROAD CONCORD, ONTARIO L4K 5C6 FOB CONCORD PREPAID Frt

Tel: 905 669 9444 Fax: 905-738-9033 0- 0 Manifest Route Trailer Vhcle

STAN IVERS (905-532-1350) Slp Sold To: (20115) 1) Ship To: DART AEROSPACE DART AEROSPACE

BILL OF LADING

ADDED TO EVERY ORDER. ***

***UNE SURCHARGE D'ENERGIE DE \$25.00

Ship From:

SERA AJOUTEE A CHAQUE COMMANDE. *** ***POUR VOS BESOINS D'ACIER INOXYDABLE,

CONTACTEZ-NOUS. NOUS L'AVONS! TEL. 800-926-2600

Page: 2 Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT. MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

DATE



Sapa Extrusions Inc., a Subsidiary of Sapa AB

Invoice To Customer

COPPER & BRASS SALES INC P.O. BOX 5116 ATTN: ACCOUNTS PAYABLE

SOUTHFIELD, MI - 48086

8001 THYSSENKRUPP PARKWAY COPPER & BRASS SALES INC

NORTHWOOD, OH - 43619

Cer 1:1:

Customer P/O S 5400337199-80 0	Certified Inspection Report		Sales Order Number	1101181140
Cert Number Page SAPA2596509 Page Customer P/O Cert Creation Date Cert Print 5400337199-80 06-FEB-17 06-FEB-1	pection k		Tion No.	Page 140.
Cert Number Page	(eport			00
Page		The second secon	Customer P/O	5400337199-80
Print EB-1	Cert Number SAPA2596509	000000000000000000000000000000000000000	Cert Creation Date	06-FEB-17
1 of 2 t Date	Page Page		Cert Prin	06-FEB-
	1 of 2		t Date	17

CustomerPart No. ALREC01030	4866540	Delivery Id	807944	B/L	4632 LB	Quantity Shipped
	1	Item No. Rev	G03226617	Item No.	06-FEB-17	Date Shipped
Marking CONTINUOUS;	W/F 19.298 F 2 CS 16.1	144 IN LN	W TOL +208/-,000	1.000 TK x 16.000 W	Extruded ACC-U-	Item Description
		/	1	IS-AUP REV	ASTMB221 REV 14 ASMESB221 REV 09	Specification

Applicable Specifications, Revisions and Exceptions

ACC-U-PLATE

nd ASTM B 209.

Acc-U-Plate(TM) product greater than 0.375" thick in 6061 T6/T6511 alloy temper meats 6861-T651 tans-ile strength-yield strength, and elongation minimums of rolled plate produced per AMS-QQ-A-250/ILA

this certified inspection report. Remainder is Aluminum. COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on

egal Statement

We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including anyspecifications forming a part of the description and that samples representative of the material met the composition andhad the mechanical properties shown on the face of this certification. Also, note that mercury is not a normal contaminantin alluminum alloys and neither it nor any of its compounds are used in the manufacture of our product. This certification is not to be reproduced in partial form without prior written approval of our Quality Assurance Dept.

Quantities per Lot / Packages

Signature And Title

06-FEB-17

Cressona Plant Manager

Mike Hammer

	G12-PKG2907911		012-PK0290/889	CIO DE CONCESSO	Package Number
	22730458		,		Lot Number
The same of the last of the same of the sa	7	7	6		Quantity
	PCS	PCS	PCS		MOU
	1627	1627	1396	Gross	Weight
	1621	1621	1390	Net	



Certified In

Sales Order Number 1101181140

Line No			nspection Report
00			1 Repo
5400337199-80	Customer P/O		rt
06-FEB-17	Cert Creation Dute	SAPA2596509	Cert Number
06-FEB-17	Cert Print Date	Page 2 of 2	Page
	1		

Min Max Min Min
Min Max Min Max Min Max Min Max Min 0.70 0.15 0.40 0.15 0.80 1.20 0.04 Others Each Others Total Min Max Min Max 0.15
Max Min Max Min Max Min Max Min
Min Max Min Max Min Max Min Min
Max Min Max Min Max Min
Min Max Min Max Min 0.15 0.80 1.20 0.04
Mn Mg Max Min Max Min 0.15 0.80 1.20 0.04
Min Max Min 0.80 1.20 0.04
Max Min 1.20 0.04
0.04
Or Max Min 0.35
Mo

0.25 Max

Composition Results

Cast	01	Pe	CII	пи	Stw	12	47		Others Each	
378	0.71	0.22	0.21	0.02	0.88	0.05	0.02	0.02	-	

Mechanical Property - Test Limits

T6511S8	Test Temper			
22730458	Lot Number			
1	# of Tests	# of Test	мои	Тез: Туре
44.3	MIN Value			U1
443	MAX Value	9.8	KSI	UTS-L
42.5	MIN Value			רד
42.5	MAX Yalue	and	KSI	TYS-L
14.3	MAX Value MIN Value MAX Value			EL 4
14.3	MAX Value		PCT	EL 4D-Long

Cert Notes

Products manufactured with a T6511 temper also meet T6 temper requirements.

Yield strength has been determined by the 0.2% offset method

All mill finish alloys produced at Sapa Industrial Extrusions comply with Directive 2011/65/EU (RoIIS 2) with the exception of 6262 alloy

In accordance with EN 10204 Inspection Certificate Type 3.1

Melted in the USA or "Qualifying Countries" (as defined in Defense Federal Acquisition Regulation Supplement (DFARS) Section 225.872-1)

Manufactured in the United States

BILL OF LADING No: PEC 31622 Ship Date 17Feb17 at 11:50 From PFW Ship From: THYSSENKRUPP MATERIALS NA Probill Via 2821 LANGSTAFF ROAD VIM DELIVERY CONCORD, ONTARIO L4K 5C6 Tel: 905 669 9444 Fax: 905-738-9033 FOB CONCORD PREPAID Frt

Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Ship To: (1) Sold To: (20115)
DART AEROSPACE DART AEROSPACE
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7 HAWKESBURY, ON K6A 1K7

-----BILL OF LADING 1) Our Order PEC- 18168- 1 Your PO/# 35299 ALUMINUM PLATE 7075-T651 DOMESTIC 1.00" THICK X 6.0000" X 95.6250" PCS Wt LBS Heat Number Tag No Quantity 9350450 58 619984 3.98 SFT 2) Our Order PEC- 18168- 2 Your PO # 35299 ALUMINUM PLATE 7075-T651 DOMESTIC 2.00" THICK X 7.0000" X 13.3750" * GRAIN DIRECTION TOWARD 13.375 INCH DIM **** Heat Number Tag No Wt LBS Quantity 9366153 7.80 SFT 4 12 247 620031

TOTAL:

PCS

13

Tags

LBS

305

Heat Number ***
9350450
9366153

*** Chemical Analysis ***

**** ADD ON TO 18051/17992 SUR-CHARGE ADDED ****

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR TO SHIPPING.

Tel: 613-632-9577 Fax: 613-632-1053

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

Page: 1 Continued

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TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION TVQ/QST# 1017327981 TQ001 TPS/GST TVH/HST # 140223934 RT0001

DATE

LADING BILL OF No: Ship Date 17Feb17 at 11:50 From PFW THYSSENKRUPP MATERIALS NA Probill

Via VIM DELIVERY 2821 LANGSTAFF ROAD FOB CONCORD CONCORD, ONTARIO L4K 5C6

Frt PREPAID Tel: 905 669 9444 Fax: 905-738-9033

0- 0 Manifest Route Vhcle Trailer

STAN IVERS (905-532-1350) Slp

PEC 31622

Sold To: (20115)

DART AEROSPACE

Ship To: DART AEROSPACE

Ship From:

BILL OF LADING

TOTAL 2 SKIDS GW. 344 LBS

*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA *** 9:00 AM TO 4:00 PM CONCORD, ONT. * **** TEL. 800-926-2600 ****

WE STOCK STAINLESS STEEL PLEASE LET US QUOTE YOUR NEXT REQUIREMENT

*************** ***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE

ADDED TO EVERY ORDER. *** *****************

***UNE SURCHARGE D'ENERGIE DE \$25.00 SERA AJOUTEE A CHAQUE COMMANDE. ***

***POUR VOS BESOINS D'ACIER INOXYDABLE,

CONTACTEZ-NOUS. NOUS L'AVONS! TEL. 800-926-2600

Page: 2 Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT. MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

RECU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION TVQ/QST# 1017327981 TQ001 TPS/GST TVH/HST # 140223934 RT0001

DATE

ALUMINUM PLATE 7075-T651 DOMESTIC 1.00" THICK X 6.0000" X 95.6250" PART NO.

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-031622-001 Signed by: Pg 1/2





CERTIFIED TEST REPORT Constellium Rolled Products Ravenswood, LLC

5 H

0

ALLOY

7075

THYSSENKRUPP CA

2821 LANGSTAFF ROAD CONCORD ON L4K 5C6

3 0 L D T 0

THYSSENKRUPP CA

2821 LANGSTAFF ROAD CONCORD ON L4K 5C6

PECKOVERS

110443237

4075

INCLUSION

182317

Serial:20160721-0110443237

Pg 1of2

Constellium ORDER NO.

CUSTOMER PURCHASE ORDER NO. & ITEM PEC-276877

T651

TEMPER GAUGE 1.03000 in

WIDTH 60.50000 in 1.537 mm

LENGTH 144.50000 in

3,670 mm

ITEM ORDERED SPEC PLATE, SAWED MILL FINISH

CLAD

CUSTOMER SPECIFICATION AMS QQ-A-250/12A

PART NUMBER

B/L NUMBER

DATE SHIPPED 07/22/2016

WT. SHIPPED 1960.000 LB

CERTIFICATION

"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination. Constallium Rolled Products Ravenswood, LLC 859 Century Road

P.O. BOX 68 RAVENSWOOD, WV 26164 USA

NO. OF PIECES

26.16 mm

GOVT, CONTRACT NO.

Steve Good - Laboratory Manager

ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS:

Kg

444.520

444.520

AMS 4045K ASTM B209-14

Piece

01

03

Serial

Load Details

Net Lbs Package 1001305386 1001305386

980.000 980,000 9350450 9350450

Lot

Parent Lot

Lot: 9350450

Tensile Room Temperature (US)

Elongation (%) Yield (KSI) Ultimate (KSI) Max Min Min Max Max Min Direction Tests 12.5 74.4 11.5 72.3 82.2 84.2 02 LT

Tensile - Room Temperature (SI)

e - Koom Tem	perature (or)		te (N/MM2)	Yield	(N/MM2)	Elong	ation (%)
Direction	Tests	Min	Max	Min	Max	Min	Max
Direction	00	567	581	498	513	11.5	12.5
	112	507	001	100			

ALUMINUM PLATE 7075-T651 DOMESTIC 1.00" THICK X 6.0000" X 95.6250" PART NO.

0

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

Pg 2of2

BL PEC-031622-001 Pg 2/2 Signed by:





CERTIFIED TEST REPORT Constellium Rolled Products Ravenswood, LLC

THYSSENKRUPP CA S H 2821 LANGSTAFF ROAD CONCORD ON P L4K 5C6 т

THYSSENKRUPP CA 8 0 O CA T 0

2821 LANGSTAFF ROAD CONCORD ON L4K 5C6

Serial:20160721-0110443237 INCLUSION 4075 110443237 PECKOVERS Constellium ORDER NO. CUSTOMER PURCHASE ORDER NO. & ITEM 182317 PEC-276877 LENGTH WIDTH TEMPER GAUGE ALLOY CLAD 144.50000 in 60.50000 in 1.03000 in T651 7075 3,670 mm 1,537 mm 26.16 mm ITEM ORDERED SPEC PLATE, SAWED MILL FINISH CUSTOMER SPECIFICATION AMS QQ-A-250/12A DATE SHIPPED B/L NUMBER PART NUMBER 07/22/2016 64636 GOVT. CONTRACT NO. NO. OF PIECES WT. SHIPPED 000002 1960.000 LB

*Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."
Constellium Rolled Products Ravenswood, LLC 859 Century Road

CERTIFICATION

P.O. BOX 68 RAVENSWOOD, WV 26164 USA

Stave Good - Laboratory Manager

Chemistry (Actual)

Core

ZR ZN TI MG CR MN FE CU 0.01 0.05 0.20 5.68 0.02 0.17 1.45 0.06

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.

CHEMISTRY BY OES: ARKSPARK CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399 WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557 DUNS Number: 090570149; CAGE Code: 1YWL9

Meroury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product. "END OF CERTIFICATION"

ALUMINUM PLATE 7075-T651 DOMESTIC 2.00" THICK X 7.0000" X 13.3750" PART NO.

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-031622-002

17Feb17 Pg 1/4

Signed by:





WIDTH

60.50000 in

1.537 mm

CERTIFIED TEST REPORT Constellium Rolled Products Ravenswood, LLC

THYSSENKRUPP CA м P

2821 LANGSTAFF ROAD CONCORD ON L4K 5C6

S 0 D T 0 THYSSENKRUPP CA 2821 LANGSTAFF ROAD CONCORD ON L4K 5CB

PECKOVERS

0

110453355

4075

INCLUSION

Serial:20160831-0110453355

Pg 1of4

CUSTOMER PURCHASE ORDER NO. & ITEM PEC-276627

Constellium ORDER NO. 181307

TEMPER GAUGE ALLOY CLAD T651 7075

2.03000 in 51.56 mm

LENGTH 144.50000 in 3,670 mm

ITEM ORDERED SPEC PLATE, SAWED MILL FINISH

CUSTOMER SPECIFICATION AMS QQ-A-250/12A

PART NUMBER

B/L NUMBER 66628

DATE SHIPPED 08/31/2016

WT. SHIPPED 9305.000 LB

NO. OF PIECES 000005

GOVT, CONTRACT NO.

CERTIFICATION

*Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road

P.O. BOX 68 RAVENSWOOD, WV 28164 USA

Steve Good - Laboratory Manager

ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS:

AMS 4045K ASTM B209-14

Load Details

etans						Donat Lat
Package	Net Lbs	Kg	Lot	Piece	Serial	Parent Lot
1001322314	1,855.000	841.413	9349077	01		
1001322314	1,855.000	841.413	9349077	02		
1001322315	1,855.000	841.413	9349077	03		
1001335644	1,870,000	848.217	9366153	03		
1001335646	1,870.000	848.217	9366154	03		

Lot: 9349077

Tensile - Room Temperature (US)

		Ultimat	le (KSI)	Yield	(KSI)	Elonga	ation (%)
Direction	Tests	Min	Max	Min	Max	Min	Max
IT	02	80.7	81.4	70.3	71.1	13.0	13.5

Room Temperature (SI) Tensile

- Koom ram	perature (31)		te (N/MM2)	Yield	(N/MM2)	Elongation (%)	
Direction	Tests	Min	Max	Min	Max	Min	Max
LT	02	556	561	485	490	13	13.5

ALUMINUM PLATE 7075-T651 DOMESTIC 2.00" THICK X 7.0000" X 13.3750" PART NO.

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

Pg 20f4

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BL PEC-031622-002 17Feb17 Signed by: Pg 2/4





CERTIFIED TEST REPORT Constellium Rolled Products Ravenswood, LLC

THYSSENKRUPP CA S 14 2821 LANGSTAFF ROAD CONCORD ON L4K 5C6 O

8 0 D T O

THYSSENKRUPP CA 2821 LANGSTAFF ROAD CONCORD ON L4K 5C6 CA

Serial:20160831-0110453355

CUSTOMER PURCHASE ORDER NO. & ITEM PEC-276627 TEMPER GAUGE (1651) 2.03000 CLAD ALLOY

110453355

Constellium ORDER NO. 181307

WIDTH LENGTH 60.50000 in 144.50000 in 1,537 mm 3.870 mm

INCLUSION

ITEM ORDERED SPEC PLATE, SAWED MILL FINISH

PECKOVERS

7075

CUSTOMER SPECIFICATION AMS QQ-A-250/12A

PART NUMBER

B/L NUMBER 66628

4075

DATE SHIPPED 08/31/2016

WT. SHIPPED 9305,000 LB

NO. OF PIECES 000005

2.03000 in

51.56 mm

GOVT, CONTRACT NO.

CERTIFICATION

"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination. Constellium Rolled Products Ravenswood, LLC 859 Century Road

P.O. BOX 68 RAVENSWOOD, WV 26164 USA

Chemistry (Actual)

Core

FE CU MN 0.06 0.16 1.48 0.05

MG CR 0.21

ZN TI 5.55 0.02

DAS 14 **7R** 0.009-89

Steve Good - Laboratory Manager

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

Lot: 9366153

Tensile - Room Temperature (US)

	polacino (a.		te (KSI)	Yield	(KSI)	Elongation (%)	
Direction	Tests	Min	Max	Min	Max	Min	Max
LT	02	82.2	82.2	71.9	72.2	13.0	13.5

Tensile - Room Temperature (SI)

		Ultima	te (N/MM2)	Yield	d (N/MM2)	Elongation (%)	
Direction	Tests	Min	Max	Min	Мах	Min_	Max
LT	02	567	567	496	498	13.0	13.5

ALUMINUM PLATE 7075-T651 DOMESTIC 2.00" THICK X 7.0000" X 13.3750" PART NO.

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-031622-002

Pg 3of4

Pg 3/4





CERTIFIED TEST REPORT Constellium Rolled Products Ravenswood, LLC

3

0

THYSSENKRUPP CA 2821 LANGSTAFF ROAD CONCORD ON L4K 5C6

S 0 D T

THYSSENKRUPP CA 2821 LANGSTAFF ROAD CONCORD ON L4K 5C6 CA

Serial: 20160831-0110453355

Signed by: 2

PECKOVERS 110453355 4075 CUSTOMER PURCHASE ORDER NO. & ITEM Constellium ORDER NO. 181307 PEC-276627 ALLOY CLAD TEMPER GAUGE WIDTH 60.50000 in 7075 2.03000 in 51.56 mm T₆51 1.537 mm ITEM ORDERED

LENGTH 144.50000 in 3.670 mm

SPEC PLATE, SAWED MILL FINISH

CUSTOMER SPECIFICATION AMS QQ-A-250/12A

PART NUMBER B/L NUMBER 66628

DATE SHIPPED 08/31/2016

INCLUSION

GOVT. CONTRACT NO. WT. SHIPPED NO. OF PIECES 9305.000 LB 000005

CERTIFICATION

Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road

P.O. BOX 68 RAVENSWOOD, WV 26164 USA

Steve Good - Laboratory Manager

Chemistry (Actual)

Core

7R FE CU MN MG CR ZN TI 0.00 2.64 0.19 0.02 0.05 0.13 1.54 0.09 5.63

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

Lot: 9366154

Tensile - Room Temperature (US)

Yield (KSI) Elongation (%) Ultimate (KSI) Max Min Max Min Max Direction Tests Min 13.5 13.5 IT 02 82.6 83.1 72.5 72.9

Tensile - Room Temperature (SI)

		Ultima	te (N/MM2)	Yield	(N/MM2)	Elong	ation (%)
Direction	Tests	Min	Max	Min	Max	Min	Max
LT	02	570	573	500	503	13.5	13.5

ALUMINUM PLATE 7075-T651 DOMESTIC 2.00" THICK X 7.0000" X 13.3750" PART NO.

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-031622-002

Pg 4of4

Signed by:

Pg 4/4





CERTIFIED TEST REPORT Constellium Rolled Products Ravenswood, LLC

THYSSENKRUPP CA 8 2821 LANGSTAFF ROAD CONCORD ON L4K 5C6

3 D т O

THYSSENKRUPP CA 2821 LANGSTAFF ROAD CONCORD ON L4K 5C6 CA

0 INCLUSION Serial:20160831-0110453355 PECKOVERS 110453355 4075 CUSTOMER PURCHASE ORDER NO. & ITEM Constellium ORDER NO. PEC-276627 TEMPER GAUGE ALLOY CLAD WIDTH LENGTH 60.50000 in 144.50000 in 2.03000 in 51.56 mm T651 3.670 mm 1.537 mm ITEM ORDERED SPEC PLATE, SAWED MILL FINISH CUSTOMER SPECIFICATION AMS QQ-A-250/12A PART NUMBER **B/L NUMBER** DATE SHIPPED 08/31/2016 NO. OF PIECES WT. SHIPPED GOVT, CONTRACT NO. 9305,000 LB 000005 Chemistry (Actual) TI

CERTIFICATION Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road

P.O. BOX 68 RAVENSWOOD, WV 26164 USA

Steve Good - Laboratory Manager

Core

FE CU 0.05 0.13 1.54

MN 0.09

MG CR 2.64 0.19 ZN 5.63

0.02

ZR 0.00

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.

CHEMISTRY BY OES: ARKSPARK CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399 WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8: 8557

DUNS Number: 090570149; CAGE Code: 1YWL9

Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product. "END OF CERTIFICATION"

MATERIAL RECEIPT INSPECTION FORM

MATERIAL CERT REC'D:	1105	THICKNESS ORDERED: (, CO
	2141	THICKNESS RECEIVED: 1.037
QUANTITY RECEIVED:		
QUANTITY INSPECTED:	241	SHEET SIZE ORDERED: W/A
QUANTITY REJECTED:	ø	SHEET SIZE RECEIVED:
DESCRIPTION	NCR (Chook	COMMENTS
DESCRIPTION	(Check Y/N)	COMMENTO
SURFACE DAMAGE	YEN	
CORRECT FINISH	CON	
CORROSION	YW	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL	Y) N	& ASTM B221
CORRECT THICKNESS	(A) N	1.037
PHOTO REQUIRED	YN	
CORRECT MATERIAL	(Y) N	GOIGI TLE
CORRECT REF # TO LINK CERT	(Y) N	Hecat # 22730458
RRECT MATERIAL IDENTFICATION		MIDDUITINGOIM
CORRECT M# ON THE MATERIAL	YN	M 136879
DOES THIS MATERIAL REQUIRE	VIB	
ENGINEERING SIGN OFF	Y(N)	
DOES THIS REQUIRE AN	YN	
EXTRUSION REPORT		
OUT OMADIE BIE	OF OF MAT	ERIAL AND PREFORM A HARDNESS CHECK.
CUT SAMPLE PIE		DRD RESULTS BELOW
	RECC	HRC HRB DUR A DUR D
TYPE OF MATERIAL		TING DON'T BON'D
SIZE OF TEST SAMPLE	: 1	A A
		N 11
TARBINESO / BOROMETER (III		located in the Quality Office
HARDNESS / DUROMETER RI		located in the Quality Office
C 18 INSPECTION		ENGINEERING SIGNOFF (if required
4.8		
INSPECTED BY: 0_8	,	SIGNED OFF BY:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

DATE	100	401	7				
MATERIAL CERT REC'D	U	10		THICKN	ESS ORDERED	1.00	0
QUANTITY RECEIVED	J	8		THICKN	ESS RECEIVED:	1.110	
QUANTITY INSPECTED	J	01		SHEET	SIZE ORDERED _		
					SIZE RECEIVED		
QUANTITY REJECTED:				Office	_		
	N 1/	^B					
DESCRIPTION	(Cr	CR neck (N)			COMMENTS		
SURFACE DAMAGE	X	N					
CORRECT FINISH	(8)	N					
CORROSION	Y	0					
CORRECT GRAIN DIRECTION	8	N					
CORRECT MATERIAL	8	N	70757	4			
CORRECT THICKNESS	8	N	1.110				
PHOTO REQUIRED	(M)	N					
CORRECT MATERIAL	(3)	D	AMS-WE	R-4-	250/124		
CORRECT REF # TO LINK CERT	(4)	N	HEAT#	9.35	0450		
ORRECT MATERIAL IDENTFICATION	(8)	N	M7075	76B	6.000x1.01	0	
CORRECT M# ON THE MATERIAL	(2)	N	H136896	3			
DOES THIS MATERIAL REQUIRE		^					
ENGINEERING SIGN OFF	Y	N					
DOES THIS REQUIRE AN		_					
EXTRUSION REPORT	Υ	N					
						IEOK .	
CUT SAMPLE PIECE	E OF	MA	ERIAL AND PRE	FORM A	HARDNESS CH	IEUN.	
	F	RECO	ORD RESULTS B		T 6115 A	DUD D	
			HRC	HRB	DUR A	DUR D	
TYPE OF MATERIAL							
SIZE OF TEST SAMPLE							
HARDNESS / DUROMETER REA	DIN	G					

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:		SIGNED OFF BY:
DATE. 17/02	124	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL 27707	57	4B	700X2.00 F	PO / BATCH NO	35279/1	13689
MATERIAL CERT REC'D: QUANTITY RECEIVED QUANTITY INSPECTED: QUANTITY REJECTED:	Al .	4	13.375 THICKNI	ESS ORDERED ESS RECEIVED BIZE ORDERED BIZE RECEIVED	2.100)
DESCRIPTION	(C)	CR neck (N)		COMMENTS		
SURFACE DAMAGE	Y	N				
CORRECT FINISH	(4)	N				
CORROSION	Y	(N)				
CORRECT GRAIN DIRECTION	(2)	N				
CORRECT MATERIAL	8	N	707576			
CORRECT THICKNESS	0	N	2.100			
PHOTO REQUIRED	Y	CN				
CORRECT MATERIAL	(0)	N	AMS-QU-A-	250/12		
CORRECT REF # TO LINK CERT	(Y)	N	HEATH 936	6153		
ORRECT MATERIAL IDENTFICATION	(4)	N	197075161	37,00XQ	.00	
CORRECT M# ON THE MATERIAL	(9)	N	19136899			
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(AV)				
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(2)				
CUT SAMPLE PIECE			FERIAL AND PREFORM A	HARDNESS C	HECK.	
TVDE OF MATERIAL		-	HRC HRB	DUKA	DOND	
TYPE OF MATERIAL				-		
SIZE OF TEST SAMPLE	D/4:			-		
HARDNESS / DUROMETER REA			A strategy of the Contract of			
	te	esters	located in the Quality Office			

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:	14 	SIGNED OFF BY:
DATE.	17/02/24	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO35299

Purchase Order Date 2/13/2017 PO Print Date 2/13/2017

Page Number 1 of 5

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8 CA

Ship To: DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

FEB 1 4 2017

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

905 669 9444

VENDOR'S TRUCK

Description/

Mfg ID

Buyer

Chantal Lavoie

Customer Tax#

Customer POID

Req Qty/

Unit of

Measure

24.00

10127-2607

Terms Currency Net 30 CAD

FOB

Ship Via: Ship Acct:

Line Reference Nbr Vendor Part Number Line Comments **Delivery Comments**

M6061T6B1.000X16.000

6061-T6 Bar 1.00 x 16.00

Promise Date

2/27/2017

Req Date/ CD

Taxable

2/27/2017

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B2TH OR

ASTM B221

FCA - (Free Carrier)

1-02-2

Line Total:

\$1,284.00

Extended

\$1,284.00

Price

M7075T6B1.500X1.500

7075 T6 BAR 1.500 x 1.500

2/21/2017

12.04

\$24.25

\$53.50

PO Unit Price

\$292.00

f

2/21/2017

Yes

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

Line Total:

\$292.00

PO Instructions: PEC ST-17091, PEC ST-16560

Note:



Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO35299

Purchase Order Date 2/13/2017 PO Print Date 2/13/2017

Page Number 2 of 5

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8 CA

Ship To: DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Contact Name

Vendor Phone

905 669 9444

Ship To Contact

Ship To Phone

Ship Via:

VENDOR'S TRUCK

Ship Acct:

M7075T6B6.000X1.000

7075-T6 BAR 6.000" X

1.000"

2/21/2017

Yes

2/21/2017

AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE Buyer

Customer POID

Customer Tax #

Terms Currency

FOB

Chantal Lavoie

10127-2607

Net 30 CAD

FCA - (Free Carrier)

\$39.81

\$355.00

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR

M7075T6B7.000X2.000

7075-T6 BAR 7.000" X 2.000" (order in billets -13.375")

2/21/2017

Yes

2/21/2017

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

NOTE: CUT 12 PCS AT 13.375", GRAIN DIRECTION ALONG 13.375"

Line Total:

\$355.00

\$85.23

- 03-33

\$1,140.00

Line Total:

\$1,140.00

PO Instructions: PEC ST-17091, PEC ST-16560

Note:



Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO35299

Purchase Order Date 2/13/2017 PO Print Date 2/13/2017

Page Number 3 of 5

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8

CA

DART AEROSPACE LTD Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Contact Name

Vendor Phone

905 669 9444

Ship To Contact

Ship To Phone

Ship Via: Ship Acct: VENDOR'S TRUCK

M6061T6B0.500X05.000

2/17/2017 6061-T6 Bar .500 x 5.00 Yes

2/17/2017

Buyer **Customer POID**

Customer Tax#

Terms Currency

FOB

Chantal Lavoie

10127-2607 Net 30 CAD

FCA - (Free Carrier)

12.00

\$9.00

\$108.00

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221

M6061T6B0.750X00.750

6061-T6 Bar .750 x .750

2/21/2017 Yes

2/21/2017

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221

M6061T6B1.000X02.000

6061-T6 Bar 1.00 x 2.00

2/17/2017 Yes

2/17/2017

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221

PO Instructions: PEC ST-17091, PEC ST-16560

Note:

12.00

12.00

Line Total:

\$4.58

\$55.00

\$108.00

Line Total:

\$7.50

\$90.00

\$55.00

400



Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO35299

Purchase Order Date 2/13/2017 PO Print Date 2/13/2017

Page Number 4 of 5

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"

CA

DART AEROSPACE LTD Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Contact Name

Vendor Phone

905 669 9444

Ship To Contact

TORONTO, ON M5W 5V8

Ship To Phone

Ship Via: Ship Acct:

VENDOR'S TRUCK

FOB

Currency

Buyer

Terms

Customer POID

Customer Tax#

12.00

1.00

FCA - (Free Carrier)

Chantal Lavoie

10127-2607

Net 30

CAD

M6061T6B1.500X01.250

6061-T6 Bar 1.50 x 1.25

Yes

2/21/2017

2/21/2017

Line Total:

\$6.50

\$90.00

\$78.00

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221

Line Total:

\$78.00

71401-45

2/21/2017 procurement quality clauses

No

2/21/2017

\$0.00 \$0.00

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retension of quality documents

Line Total:

\$0.00

PO Instructions: PEC ST-17091, PEC ST-16560

Note:



Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO35299

Purchase Order Date 2/13/2017 PO Print Date 2/13/2017

Page Number 5 of 5

Order From:

CA

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8

Ship To:

DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via: Ship Acct: 905 669 9444

VENDOR'S TRUCK

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms Currency Net 30 CAD

FOB

FCA - (Free Carrier)

\$3,402.00

PO Total:

PO Instructions: PEC ST-17091, PEC ST-16560

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr:

2

Change Date:

2/13/2017